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09/768,512	01/25/2001	Hiroshi Kodama	Q62804	5316

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EXAMINER	
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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

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GROUP 1700

Application Number: 09/768,512
Filing Date: January 25, 2001
Appellant(s): KODAMA ET AL.

Kodama et al., and the assignee, Calsonic Kansei Corporation,
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed April 3, 2006 appealing from the Office action mailed October 19, 2005.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

No amendment after final has been filed.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

4,948,774	**Usui et al.**	**08-1990**
5,026,111	**Usui et al.**	**06-1991**
4,248,186	**Nonnenmann et al.**	**08-1981**
JP-8141413	**Shimada Yuji**	**04-1996**

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-2, 6-8, and 10 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Specifically, in claim 1, the newly added limitation is nowhere disclosed in the specification. Throughout the specification, applicants recite that the brazing material holds in the solder-rising preventing grooves without specifying whether that brazing material is the melted one. Also, with respect to the melted brazing material, it is nowhere disclosed in the specification.

3. The following is a quotation of the second paragraph of 35 U.S.C. 1 12:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-2, 6-8, and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, it is unclear as to what structural limitation applicants are attempting to recite and where the newly added limitation is disclosed in the specification as on pages 4-5 and throughout the specification, applicants only disclose that the brazing material holds in the solder-rising grooves without specifying whether the brazing material is the melted one. Also, it is unclear as to where the unmelted brazing material is disclosed in the specification.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claim 1-2, 6-8, and10 are rejected under 35 U.S.C. 103(a) as obvious over Usui et al (4,948,774 or 5,026,61 1) alone or in view of JP 08-141413 and Nonnenmann et al (4,248, 186). Usui et al discloses a metallic carrier for a catalytic converter comprising: a corrugated sheet 4 made of metal; a flat sheet 3 made of metal; a core 1 formed by superposing the corrugated sheet and the flat sheet one on another and by rolling the corrugated sheet and the flat sheet in multiple times; a brazing material surrounding an outer periphery of an exhaust gas outlet side and an exhaust gas inlet side of the core; and a metallic outer cylinder 6; wherein an assembly including the core and the brazing material is forcedly enclosed in said metallic outer cylinder 6 (col. 7, lines 25-30 in Usui (774 and col. 6, lines 25-32 in Usui '661); wherein the metallic outer cylinder 6 is subjected to heat treatment to join the corrugated and flat sheets, and to join an inner periphery of the metallic outer cylinder and an outer periphery of the core by the brazing material; and wherein at least one solder-rising preventing groove 7 is defined over an

entire circumference of the inner periphery of the outer cylinder 6 at a position located on an exhaust gas inlet side of an area for joining the core.

Although Usui et al is silent as to whether the corrugated sheet and the flat sheet may be diffusionally joined, such diffusion joining is directed to method limitation which is of no patentable moment in apparatus claims. It appears that the claim is a product-by-process claim and when the patentability of a product-by-process claim is determined, the relevant inquiry is whether the product itself is patentable. *In re Brown*, 459 F.2d 531, 535, 173 USPQ 685, 688 (CCPA 1972). If a product is the same as or would have been obvious to one having ordinary skill in the art from a product of the prior art, the product is unpatentable even though the prior made product was made by different process. *In re Thorpe*, 777 F.2d 695, 697, 227 USPQ 964, 966 (Fed. Cir. 1985). Since the product of the instant claim is substantial the same as that of Usui et al, it is unpatentable even though the product of Usui et al may be made by different process. Similar, the features of brazing foil material wound around" and "press-fitted" are directed to a method of manufacturing the metallic carrier which are of no patentable moment in apparatus claims for the same regions set forth above. It should be noted that the method of forming the device is not germane to the issue of patentability of the device itself. Note that since the core and the brazing material in Usui et al is forcedly enclosed in said metallic outer cylinder 6 (col. 7, lines 25-30 in Usui '774 and col. 6, lines 25-32 in Usui '661 which is considered as press-fitted". In any event, it would have been obvious to one having ordinary skill in the art at the time the invention was made to select an appropriate method for connecting the sheets and

using the brazing foil for joining the core to the outer cylinder as taught by JP 08-14 1413 and press-fitting the core and brazing material into the outer cylinder as taught by Nonnenmann et al in the apparatus of Usui et al, as an alternative method of manufacturing the metallic carrier, as such is conventional in the art and no cause for patentability here.

With respect to the newly added limitation, it is unclear as to what applicants are attempting to recite as discussed in the 112 rejection above, apparently the newly added limitation introduces new matter. Therefore, the difference between applicants claim carrier and that of the prior art cannot be identified by the specification of the instant application. As best understood, the newly added limitation is directed to method of making which is of no patentable moment in apparatus claims and since after being melted, the instant brazing material holds in the groove which is the same as that of Usui et al. As set forth above, when the claim is a product-by-process claim and when the patentability of a product-by-process claim is determined the relevant inquiry is whether the product itself is patentable. *In re Brown*, 459 F.2d 531, 535, 173 USPQ 685, 688 (CCPA 1972). If a product is the same as or would have been obvious to one having ordinary skill in the art from a product of the prior art, the product is unpatentable even though the prior art product was made by different process. *In re Thorpe*, 777 F.2d 695, 697, 227 USPQ 964, 966 (Fed. Cir. 1985). Since the product of the instant claim is substantial the same as that of Usui et al, it is unpatentable even though the product of Usui et al may be made by different process. It should be noted that the method of forming the device is not germane to the issue of patentability of the device itself. In

any event, in Usui '774, one of the brazing materials 8 locates at the exhaust outlet side and one of the grooves 7 locates at the exhaust inlet side and therefore the carrier of Usui '774 meets the instant claim.

With respect to claim 8, Usui et al '774 discloses that the grooves may be formed in a variety of fashions and not limited to the illustrated embodiments (col. 4, lines 26-37). Furthermore the shape of the grooves is not considered to confer patentability to the claim. It would have been an obvious matter of design choice to select an appropriate shape for the grooves, since such a modification would have involved a mere change in the shape of a component. A change in shape is generally recognized as being within the level of ordinary skill in the art, absence showing any unexpected results. *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

With respect to claim 10, it would have obvious to one having ordinary skill in the art to construct the groove at only one end of the outer cylinder, if one willing to forgo its benefit of having the brazing material at both ends thereof and since providing the brazing material at only one end would have been enough to hold the carrier within the casing.

(10) Response to Argument

Applicants' arguments in the appeal brief are not persuasive.

(1) With respect to the 112, first and second paragraphs, "Appellants submit that "the melted and unmelted brazing foil material" are properly and distinctly recited in

the claims and that such features have adequate support in the specification." Such contention is not persuasive as set forth above, throughout the specification, applicants recite that the brazing material holds in the solder-rising preventing grooves and have never specify that whether the brazing material is the melted one. Also, the phrase of "unmelted" brazing material has never been mentioned in the instant specification. It is unclear as to whether applicants are attempting to recite the method of making the carrier or the carrier itself.

(2) Applicants argue that "Usui '611 specifically recites that the molten brazing material is to penetrate, "uniformly over the entire areas of contact between the metal casing 6 and the honeycomb core structure 2 by capillary of the fine recesses 7, thereby joining these two members reliably (col. 6, lines 36-41 of Usui '611) (emphasis added). Accordingly, since the reference specifically teaches that the material penetrates the entire" area of contact between the metal casing 6 and the honeycomb core structure 2, which would include the end portions, the fine recesses 7 do not prevent molten brazing material from flowing towards the ends of the honeycomb structure." Such contention is not persuasive since the grooves 7 of Usui et al serve to retain all brazing material 8 when it is melted and thereby to prevent the melted brazing material from flowing out of the carrier (Col. 5, lines 12-18).

In conclusion, although the applied references do not disclose the process of melting a brazing material only at the specific location of a solder-rising preventing groove and not at other area of the periphery of the honeycomb core; however, the final

product of the applied references disclose the brazing material are present all along the outer periphery of the honeycomb body in order to secure the core with the inner housing similar to the instant invention. As set forth above, when the claim is a product-by-process claim and when the patentability of a product-by-process claim is determined the relevant inquiry is whether the product itself is patentable. *In re Brown*, 459 F.2d 531, 535, 173 USPQ 685, 688 (CCPA 1972). If a product is the same as or would have been obvious to one having ordinary skill in the art from a product of the prior art, the product is unpatentable even though the prior art product was made by different process. *In re Thorpe*, 777 F.2d 695, 697, 227 USPQ 964, 966 (Fed. Cir. 1985).

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Tom Duong TP

September 25, 2006

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